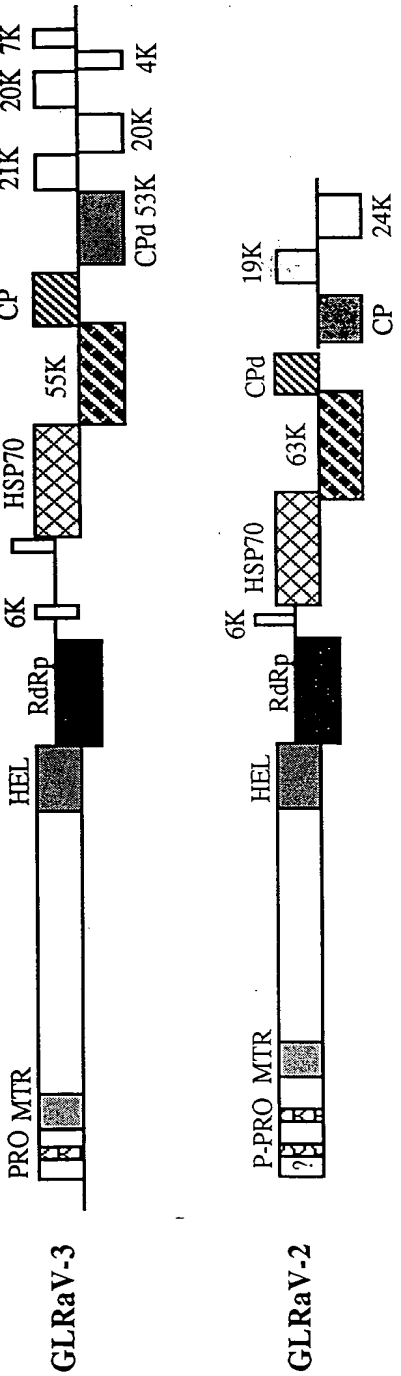
Figure 1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4K
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CP
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24K

Figure 2

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Figure 2-cont.

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Figure 2-cont.

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Figure 2-cont.

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Figure 2-cont.

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Figure 2-cont.

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Figure 2-cont.

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Figure 2-cont.

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Figure 2-cont.

```
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```

Figure 2-cont.

```
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```

Figure 2-cont.

```
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```

Figure 3

```
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ttttcctgct gtttgaggga agtttgccct tcttcttccg tcgtccttcg taaaccatta 120
tttctatttc ctctcctttt aagtttttaa gtttcgct                        158
```

Figure 4

```
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atagggaacg tgaagttgtc ggacttcaca cccaggtgcg cagctatgat ttacattgga 180
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cagtacgctg ttgtcagcgg ctcagtcagc gcgctgagag gggatggtaa gaaggtcttg 300
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gtcaagcgcg agcagcctaa accggctgtt aagcaagatg agcagaagcc caaacggcaa 480
gcgtcacatt gggctgttaa gccaacagct gttggcgtcc acgtaccact tcctaaaaaa 540
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```

Figure 4-cont.

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```

Figure 4-cont.

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Figure 4-cont.

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```

Figure 5

```
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aatgcattac ttgtcgtaca ctaccaccgg gtagtgccgt atgcccccgt caagcgcgag  180
cagcctaaac cggctgttaa gcaagatgag cagaagccca aacggcaagc gtcacattgg  240
gctgttaagc caacagctgt tggcgtccac gtaccacttc ctaaaaaaca ggaagcactg  300
gagccagcgc aatcagtccc acaacagtcg ttggaggaga aggccgcctt gacgtttggc  360
```

Figure 6

```
VSGSVSALRG DGKKVLMEAR TSTSATSDVS DFDVVFEAVS NALLVVHYHR      50
VVPYAPVKRE QPKPAVKQDE QKPKRQASHW AVKPTAVGVH VPLPKKQEAL     100
EPAQSVPQQS LEEKAALTFG                                      120
```

Figure 7

```
ctgaagccgc gggaaaggga gaagctgagg gaactctttc cagagctttc gatacagttc  60
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gtgaagcgga gaatcaatga gatcctcttt ctttccacag ctgggggaga ttcgtacgtg 300
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gtgaagaggg aaggtgatta cctggcctac aatgttggtc agtgtggtga gatgtatgaa 600
cattccttct ctaacgtaag cgggtttttc accttttctt atgtacgcac ttcgtccggg 660
aacgtgttta agctagagta tgagggatac cgttgtggtt accatcatct cactatgtgt 720
agggctcaga agtcacctgg aactgaggtt acgtataggt cgttggtccc gtcgttcgtg 780
ggcaaatcgc tggtgttcat acctgttgta gctggt                          816
```

Figure 8

LKPREREKLR	ELFPELSIQF	SDSVRSSHPF	ANAMRSCFNG	IFSRRCGNVC	FFDIGGSFTY	60
HVKAGHVNCH	VCNPVLDVKD	VKRRINEILF	LSTAGGDSYV	SSDLLTEAAS	KSVSYCSRES	120
QNCDSRADAG	FMVDVYDISP	QQVAEAMDKK	GALVFDIALM	FPVELLYGNG	EVYLEELDTL	180
VKREGDYLAY	NVGQCGEMYE	HSFSNVSGFF	TFSYVRTSSG	NVFKLEYEGY	RCGYHHLTMC	240
RAQKSPGTEV	TYRSLVPSFV	GKSLVFIPVV	AG			272

Figure 9

```
                                        MT I                          MT Ia            MT II
Consensus#1  .............P.....F.....S.H......R...N.............D.GG..............H.C.P..D..D..R........

GLRaV2-MTR   MSEATQNSLTRFYPQFELKFSHSSHSDHPAAAASRLLENETLVRLCGNS-VSDIGGCPLFHLHSKTQRRVHVCRPVLDGKDAQRRVVRDLQY
BYV-MTR      MGEAVQSGLTRAYPQFNLSFTHSVYSDHPAAAGSRLLENETLASMAKSS-FSDIGGCPLFHIK-RGSTDYHVCRPIYDMKDAQRRVSRELQA
LIYV-MTR     LSMDEKKMITNLFPDIQMSFNQKSYSNHGVFNAMRACENFYFSRKFKNSDYIDAGGDVVSTLRSK-NHNVHICSPRLDLKDAARHIQRATVI
CTV-MTR      MSENQQVMLTRAYPEFNINFIHSVHSDHPVAAGSRALENHLVRKHAGTD-YSDVGGCPLFHLRA-GHSGVHVCRPVYDVKDAHRRVVRHHQL
LCV-MTR      LSTRQKKIVCDLFPHLKFEFKETTQSSHPVFNVVRTVSNFVLYKMQEGRHFVDFGGNIGTVINSE-CDDVHICNPVADSRDAKRHVDNGLFL
GLRaV3-MTR   LKPREREKLRELFPELSIQFSDSVRSSHPFANAMRSCFNGIFSRRCGNVCFFDIGGSFTYHVKAG-HVNCHVCNPVLDVKDVKRRINEILFL

                                          MT IIa      MT III
Consensus#1  .......................C......C.........V.VYD........AM...............P.....................

GLRaV2-MTR   SNVRLG-DDD--KILEGPRN-IDICHYPLGACDHESSAMMMVQVYDASLYEICGAMIKKKSRITYLTMVTPGEFLDGRECVYMESLDCEIEV
BYV-MTR      RGLVENLSRE--QLVEAQAR-VSVCPHTLGNCNVKSDVLIMVQVYDASLNEIASAMVLKESKVAYLTMVTPGELLDEREAFAIDALGCDVVV
LIYV-MTR     DGLKG------------YGETISFCTNKTEDCAVNRDIIIAVEVYDMTLRDMAKAMLSHGSRKFEFSCIIPPEIFTKECNVELYEGRLKV--
CTV-MTR      SKVSLDQSDGVKQVGWTVNT-NSVCGNILGECYHASEAMVMVQVYDVPLRELCRAMINKKTSVCYMTMVTPGELLDARESFFIKDLDCSVEL
LCV-MTR      AKSVG------------VSNNISVCNKLAQHCNHKSDRAVMVEVYDMTLTEMCQAMLAHGTIRLDFILLLPGDLLEDFNTITIFDGGCKI--
GLRaV3-MTR   STAGGDSYVSSDLLTEAASKSVSYCSRESQNCDSRADAGFMVDVYDISPQQVAEAMDKKGALVFDIALMFPVELLYGNGEVYLEELDTLV--

                      MT IV
Consensus#1  ....D...Y..........H..................G..F...............................................

GLRaV2-MTR   DVHADVVMYKFGSSC--YSHKLSIIKDIMTTPYLTLG-GFLFSVEMYEVRMGVNYFKITKSEVSPSISCTKLLRYRRANSDVVKVKLPRFD
BYV-MTR      DTRRDMVQYKFGSSC--YCHKLSNIKSIMLTPAFTFS-GNLFSVEMYENRMGVNYYKITRSAYSPEIRGVKTLRYRRACTEVVQVKLPRFD
LIYV-MTR     TRIGDNVEYYYGSNGETFSHSCQTLKDILSVQVFQFG-GRVFKKTLEHSRGQLHFFSICICEKIEPGSVKLKTYYQRSELDKVTLRIPVKD
CTV-MTR      DPIADRVVYCFNNSA--YTHTYSTICECMRTPCLVVD-GFLFTIEMVSLRCSVNYYCITKSSVCPRISETKRLRYRRCDSDLIRIKIPRYS
LCV-MTR      TKDDDKVYYYYGDAAEAYTHDLNNLRNIMTDNLVCVD-GTAFKKTLETSYGPFRHFSLTKLETFPSGKIEFLTMYDKCEKNKMLVKVPMRN
GLRaV3-MTR   KREGDYLAYNVGQCGEMYEHSFSNVSGFFTFSYVRTSSGNVFKLEYEGYRCGYHHLTMCRAQKSPGTEVTYRSLVPSFVGKSLVFIPVVAG
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Figure 10

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gtgggcgaat cgtttaagtc cttcgaatat aagtgctata atgctccccc aggtggcggt    60
aagacgacga cgttagtgga cgaattcgtt aagtcaccca atagcacagc caccattacg   120
gctaatgtgg gaagttctga ggacataaat atggcggtga agaagagaga tccgaatttg   180
gaaggtctca acagtgctac cacagttaac tccagggtgg taaactttat cgtcagggga   240
atgtataaaa gggttttggt ggatgaggtg cacatgatgc atcaaggctt actacaacta   300
ggcgtcttcg caaccggcgc gtcggaaggc ctcttttttg gagacataaa tcagatacca   360
ttcataaaca gggagaaggt gtttaggatg gattgtgctg tttttgttcc aaagaaggaa   420
agcgttgtat acacttctaa atcgtacagg tgtccgttag atgtttgcta cttgttgtcc   480
tcaatgaccg taaggggaac ggaaaagtgt taccctgaaa aggtcgttag cggtaaggac   540
aaaccagtag taagatcgct gtccaaaagg ccaattggaa ccactgatga cgtagctgaa   600
ataaacgctg acgtgtactt gtgcatgacc cagttggaga agtcggatat gaagaggtcg   660
ttgaagggaa aaggaaaaga aacaccagtg atgacagtgc atgaagcaca gggaaaaaca   720
ttcagtgatg tggtattgtt taggacgaag aaagccgatg actccctatt cactaaacaa   780
ccgcatatac ttgttggttt gtcgagacac acacgctcac tggtttatgc cgctctgagc   840
tcaaagttgg acgataaggt cggcacatat att                                873
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Figure 11

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VGESFKSFEY KCYNAPPGGG KTTTLVDEFV KSPNSTATIT ANVGSSEDIN MAVKKRDPNL   60
EGLNSATTVN SRVVNFIVRG MYKRVLVDEV HMMHQGLLQL GVFATGASEG LFFGDINQIP  120
FINREKVFRM DCAVFVPKKE SVVYTSKSYR CPLDVCYLLS SMTVRGTEKC YPEKVVSGKD  180
KPVVRSLSKR PIGTTDDVAE INADVYLCMT QLEKSDMKRS LKGKGKETPV MTVHEAQGKT  240
FSDVVLFRTK KADDSLFTKQ PHILVGLSRH TRSLVYAALS SKLDDKVGTY I           291
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Figure 12

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atgaattttg gaccgacctt cgaaggggag ttggtacgga agataccaac aagtcatttt      60
gtagccgtga atgggtttct cgaggactta ctcgacggtt gtccggcttt cgactatgac     120
ttctttgagg atgatttcga aacttcagat cagtctttcc tcatagaaga tgtgcgcatt     180
tctgaatctt tttctcattt tacgtcgaaa atagaggata ggttttacag ttttattagg     240
tctagcgtag gtttaccaaa gcgcaacacc ttgaagtgta acctcgtcac gtttgaaaat     300
aggaatttca acgccgatcg cggttgtaac gtgggttgtg acgactctgt ggcgcatgaa     360
ctgaaggaga ttttcttcga ggaggtcgtt aacaaagctc gtttagcaga ggtgacggaa     420
agccatttgt ccagcaacac gatgttgtta tcagattggt tggacaaaag ggcacctaac     480
gcttacaagt ctctcaagcg ggctttaggt tcgtttgtct ttcatccgtc tatgttgact     540
tcttatacgc tcatggtgaa agcagacgta aaacccaagt tggacaatac gccattgtcg     600
aagtacgtaa cggggcagaa tatagtctac cacgataggt gcgtaactgc gctttttct      660
tgcattttta ctgcgtgcgt agagcgctta aaatacgtag tggacgaaag gtggctcttc     720
taccacggga tggacactgc ggagttggcg gctgcattga ggaacaattt gggggacatc     780
cggcaatact acacctatga actggatatc agtaagtacg acaaatctca gagtgctctc     840
atgaagcagg tggaggagtt gatactcttg acacttggtg ttgatagaga agttttgtct     900
actttctttt gtggtgagta tgatagcgtc gtgagaacga tgacgaagga attggtgttg     960
tctgtcggct ctcagaggcg cagtggtggt gctaacacgt ggttgggaaa tagtttagtc    1020
ttgtgcacct tgttgtccgt agtacttagg ggattagatt atagttatat tgtagttagc    1080
ggtgatgata gccttatatt tagtcggcag ccgttggata ttgatacgtc ggttctgagc    1140
gataattttg gttttgacgt aaagattttt aaccaagctg ctccatattt ttgttctaag    1200
tttttagttc aagtcgagga tagtctcttt tttgttcccg atccacttaa actcttcgtt    1260
aagtttggag cttccaaaac ttcagatatc gaccttttac atgagatttt tcaatctttc    1320
gtcgatcttt cgaagggttt caatagagag gacgtcatcc aggaattagc taagctggtg    1380
acgcggaaat ataagcattc gggatggacc tactcggctt tgtgtgtctt gcacgtttta    1440
agtgcaaatt tttcgcagtt ctgtaggtta tattaccaca atagcgtgaa tctcgatgtg    1500
cgccctattc agaggaccga gtcgctttcc ttgctggcct tgaaggcaag aattttaagg    1560
tggaaagctt ctcgttttgc cttttcgata aagaggggt                           1599
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Figure 13

MNFGPTFEGE LVRKIPTSHF VAVNGFLEDL LDGCPAFDYD FFEDDFETSD QSFLIEDVRI 60
SESFSHFTSK IEDRFYSFIR SSVGLPKRNT LKCNLVTFEN RNFNADRGCN VGCDDSVAHE 120
LKEIFFEEVV NKARLAEVTE SHLSSNTMLL SDWLDKRAPN AYKSLKRALG SFVFHPSMLT 180
SYTLMVKADV KPKLDNTPLS KYVTGQNIVY HDRCVTALFS CIFTACVERL KYVVDERWLF 240
YHGMDTAELA AALRNNLGDI RQYYTYELDI SKYDKSQSAL MKQVEELILL TLGVDREVLS 300
TFFCGEYDSV VRTMTKELVL SVGSQRRSGG ANTWLGNSLV LCTLLSVVLR GLDYSYIVVS 360
GDDSLIFSRQ PLDIDTSVLS DNFGFDVKIF NQAAPYFCSK FLVQVEDSLF FVPDPLKLFV 420
KFGASKTSDI DLLHEIFQSF VDLSKGFNRE DVIQELAKLV TRKYKHSGWT YSALCVLHVL 480
SANFSQFCRL YYHNSVNLDV RPIQRTESLS LLALKARILR WKASRFAFSI KRG 533

Figure 14

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atgttatgtt gttcagccag tgtcaaattt tcaaacgggt tacaattatc gctacttatt  60
tgcgcatgtt tgttagcggt gctaattgtt agcttttgta gaaggcgatg a           111
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Figure 15

MLCCSASVKF SNGLQLSLLI CACLLAVLIV SFCRRR 36

Figure 16

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MDYIRPLRVF SFPHVNNTLE YVRYNKANGD VGAFLTTMKF IGNVKLSDFT PRCAAMIYIG   60
KLTKGVKRTF VPPPVKGFAR QYAVVSGSVS ALRGDGKKVL MEARTSTSAT SDVSDFDVVF  120
EAVSNALLVV HYHRVVPYAP VKREQPKPAV KQDEQKPKRQ ASHWAVKPTA VGVHVPLPKK  180
QEALEPAQSV PQQSLEEKAA LTFGLFFSKG GGDESDAVIL RKGKLFNRAL NVPIDVKNTF  240
VWAKIWDEAS RRRGYFYVKD RAVKFFPIVR GRATIEDFIV NTAPGCDVAL PRIELWSMRE  300
RAFVCTTKGW CWFNNERLRG EIYRRRCFSS SFSIGFLMHL GFRSLKVIRF AGTNILHMPS  360
LNEERTFGWK GGDVYLPNVP KTAIVAGDRT RLGGEILASV ANALNQEEVY SSVVSSITNR  420
LVLRDQSALL SHLDTKLCDM FSQRDAMIRE KPSHRCDVFL KPREREKLRE LFPELSIQFS  480
DSVRSSHPFA NAMRSCFNGI FSRRCGNVCF FDIGGSFTYH VKAGHVNCHV CNPVLDVKDV  540
KRRINEILFL STAGGDSYVS SDLLTEAASK SVSYCSRESQ NCDSRADAGF MVDVYDISPQ  600
QVAEAMDKKG ALVFDIALMF PVELLYGNGE VYLEELDTLV KREGDYLAYN VGQCGEMYEH  660
SFSNVSGFFT FSYVRTSSGN VFKLEYEGYR CGYHHLTMCR AQKSPGTEVT YRSLVPSFVG  720
KSLVFIPVVA GSSVSFKTIV LDSDFVDRIY SYALNTIGTF ENRTFEYAVG AVRSQKTHVI  780
TGSRVVHSKV DISPDDMWGL VVAVMAQAIK DRAKSIRSYN FIKASEGSLA GVFKLFFQTV  840
GDCFSNAVSV YAKAMVHDNF NVLETLMSMP RAFIRKVPGS VVVTICTSGA SDRLELRGAF  900
DISKETFGRK LKNSRLRVFS RAIVEDSIKV MKAMKTEDGK PLPITEDSVY AFIMGNVSNV  960
HCTRAGLLGG SKATVVSSVS KGLVARGAAT KAFSGITSFF STGSLFYDRG LTEDERLDAL 1020
VRTENAINSP VGILETSRVA VSKVVAGTKE FWSEVSLNDF TTFVLRNKVL IGIFVASLGA 1080
APIAWKYRRG IAANARRYAG SSYETLSSLS SQAAGGLRGL TSSTVSGGSL VVRRGFSSAV 1140
TVTRATVAKR QVPLALLSFS TSYAISGCSM LGIWAHALPR HLMFFFGLGT LLGARASANT 1200
WKFGGFSNNW CAVPEVVWRG KSVSSLLLPI TLGVSLIIRG LLNDTIPQLA YVPPVEGRNV 1260
YDETLRYYRD FDYDEGAGPS GTQHEAVPGD DNDGSTSSVS SYDVVTNVRD VGISTNGEVT 1320
GEEETHSPRS VQYTYVEEEV APSAAVAERQ GDPSGSGTAD AMAFVESVKK GVDDVFHQQS 1380
SGETAREVEV DGKGLLPESV VGEAPTQERG RAADGNTAQT AVNEGDREPV QSSLVSSPQA 1440
DIPKVTQSEV HAQKEVKQEV PLATVSGATP IVDEKPAPSV TTRGVKIIDK GKAVAHVAEK 1500
KQVQVEQPKQ RSLTINEGKA GKQLCMFRTC SCGVQLDVYN EATIATRFSN AFTFVDNLKG 1560
RSAVFFSKLG EGYTYNGGSH VSSGWPRALE DILTAIKYPS VFDHCLVQKY KMGGGVPFHA 1620
DDEECYPSDN PILTVNLVGK ANFSTKCRKG GKVMVINVAS GDYFLMPCGF QRTHLHSVNS 1680
IDEGRISLTF RATRRVFGVG RMLQLAGGVS DEKSPGVPNQ QPQSQGATRT ITPKSGGKAL 1740
SEGSGREVKG RSTYSIWCEQ DYVRKCEWLR ADNPVMALEP DYTPMTFEVV KTGTSEDAVV 1800
EYLKYLAIGI ERTYRALLMA RNIAVTTAEG VLKVPNQVYE SLPGFHVYKS GTDLIFHSTQ 1860
DGLRVRDLPY VLIAEKGIFT KGKDVDAVVA LGDNLFVCDD ILVFHDAINL IGALKVARCG 1920
MVGESFKSFE YKCYNAPPGG GKTTTLVDEF VKSPNSTATI TANVGSSEDI NMAVKKRDPN 1980
LEGLNSATTV NSRVVNFIVR GMYKRVLVDE VHMMHQGLLQ LGVFATGASE GLFFGDINQI 2040
PFINREKVFR MDCAVFVPKK ESVVYTSKSY RCPLDVCYLL SSMTVRGTEK CYPEKVVSGK 2100
DKPVVRSLSK RPIGTTDDVA EINADVYLCM TQLEKSDMKR SLKGKGKETP VMTVHEAQGK 2160
TFSDVVLFRT KKADDSLFTK QPHILVGLSR HTRSLVYAAL SSKLDDKVGT YISDASPQSV 2220
SDALLHTFAP AGCFRGI                                              2237
```

Figure 17

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aaaaatcctt caataaattt gaaataaaca aaagtaagaa aaatgaaata attaggctag  60
tctttttgtt cgtctttcgc ttttgtagaa taggttttat ttcgaggtaa gatgactaaa 120
ctttacctca cggtttaata ctctgatatt tgtaaaatta gtccgtaaag tcgatagtga 180
tattatatta gtatagtata ataaacgcca aaatccaatt aaagtttggg acctaggcgg 240
gcctcttacg aggctaactt atcgacaata agttaggtc                        279
```